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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/705,180	11/11/2003	Daniel P. Vollmer	020569-03900 (P202-1284-U	4645	
71762 JONES & SMIT	7590 05/28/200 ΓH . LLP	EXAMINER			
2777 ALLEN P		FIGUEROA, JOHN J			
SUITE 800 HOUSTON, TX 77019			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/705,180	VOLLMER, DANIEL P.			
		Examiner	Art Unit			
		John J. Figueroa	1796			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
	Responsive to communication(s) filed on 20 Fe	shruary 2000				
· ·						
3)□	<i>,</i> —					
J)الــا	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	closed in accordance with the practice under z	x parte Quayle, 1955 C.D. 11, 40	55 O.G. 215.			
Dispositi	on of Claims					
4)🛛	Claim(s) 30-36,39,57,60,61 and 64-90 is/are pe	ending in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
	6)⊠ Claim(s) <u>30-36, 39, 57, 60, 61 and 64-90</u> is/are rejected.					
7)	Claim(s) is/are objected to.	•				
8)	Claim(s) are subject to restriction and/or	election requirement.				
Application Papers						
		•				
9) The specification is objected to by the Examiner.						
10)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate			

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DETAILED ACTION

Response to Amendment

- 1. The nonstatutory obviousness-type double patenting rejection over copending application 10/911,038 has been maintained for reasons previously made of record in item 2 on page 2 of the Office Action dated December 14, 2008 (hereinafter 'OA').
- 2. The 35 U.S.C. 112, first paragraph, rejection of claims 70-76 and 84-90 that was previously made of record in item 5 on page 3 of OA has been withdrawn in view of the amendment to the rejected claims in Applicant's response to OA submitted February 20, 2009 (hereinafter 'Response').
- 3. The 35 U.S.C. 102(b) rejection of claims 70-76 and 84-90 as being anticipated by United States Paten Number (USPN) 6,479,573 B2 to Burdick et al. (hereinafter 'Burdick') previously made of record in item 7 on page 4 of OA has been withdrawn in view of Applicant's amendment to the rejected claims in Response.
- 4. The 35 U.S.C. 102(b) rejection of claims 70-76 and 84-90 as being anticipated by USPN 5,785,747 to Vollmer et al. (hereinafter 'Vollmer) has been maintained for the same reasons previously made of record in item 7 on page 4 of OA. This rejection has been extended to 30-36, 39, 57, 60, 61, 64-69 and 77-83 in view of Applicant's amendment in Response to these claims to further include the method of use step: "wherein the thickened brine is introduced into the well during completion or workover."

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5. The 35 U.S.C. 103(a) rejection of claims 30-36, 39, 57, 60, 61, 64-69 and 77-83 over Burdick in view of USPN 6,315,061 B1 to Boatman (hereinafter 'Boatman') previously made of record in item 8 on page 6 of OA has been withdrawn in view of Applicant's amendment to the rejected claims in Response.

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 7. Independent claims 30, 57, 70 and 84, as amended, and claims 31-36, 39, 60, 61, 64-69, 71-76 and 85-90 that depend therefrom, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preambles of the rejected independent claims are drawn to a "method for thickening a brine". These cited claims have been amended to include a subsequent process step that recites "and further wherein the thickened brine is introduced into the well during completion or workover." However, this limitation in the current claims, as amended, is indefinite because it is unclear and confusing as to how the step of introducing a *thickened* brine into a well during a completion/workover process (wherein the brine, of course, has already been thickened) would be a proper method step further limiting "a method for thickening a brine." Apparently, the method steps currently in the presently rejected claims are a mixture of steps belonging to distinct statutory classes: a

method of preparing a viscosified fluid and the subsequent *use* of said viscosified fluid, respectively, which is thereby improper.

For purposes of the instant Office Action, this newly added limitation to the rejected independent claims has been interpreted as further requiring the viscosified brine to be present in a well undergoing a completion or workover process.

Claim Rejections - 35 USC § 102

- 8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 9. Claims 30-36, 39, 57, 60, 61 and 64-90 are rejected under 35 U.S.C. 102(b) as being anticipated by Vollmer.

It is noted that a formate solution having zero sodium formate would read on the limitation "no more that 25% of the alkali formate is sodium formate" that is present in independent claim 57. In other words, the alkali formate solutions recited in claims 57, 60, 61 and 64-69 do not require the presence of sodium formate.

Vollmer was discussed previously in item 7 of OA and the grounds of rejection and arguments therein are incorporated herein in their entirety.

As discussed in item 7 of OA, Vollmer discloses viscosifying compositions and methods for viscosifying aqueous solutions/brines in oil field operations including completion of workover (see Abstract); wherein **the viscosifying composition can be in the form of a slurry, liquid** *or* **paste** that comprises a high-density brine, an alcohol and a water-soluble or water-dispersible polymer; wherein the polymer can be, e.g.,

anionic cellulose, polyanionic cellulose or carboxymethyl hydroxyethyl cellulose, and wherein the salt solution can be a formate brine. (Abstract; col. 2, lines 1-31; col. 4, lines 15-67; col. 7, lines 1-6 and 33-64; col. 8, lines 20-37; Example 1) Crosslinking agents and other additives can be added to viscosify high density brine while used in subterranean drilling applications, such as completion and workover processes. (Col. 8, lines 50-61; Example 3 on col. 9-10)

Vollmer further discloses density ranges for bromide and chloride salts, such as 11.6 to 15.1 pounds/gallon for calcium chloride/bromide brines, that are within the range recited in Applicant's claims. (Table I) The polymer component can range from 1-65% by suspension weight, whereas the salt is 0.1 to about 50% by weight. (Col. 7, lines 53-64) [Examiner notes that in Examples 1-4 of the present specification, results of which are depicted on Table IV, samples of brine containing above 40% formate solutions are depicted as having, for example, 11.0 to 11.8 pounds per gallon that would be within the range cited previously from Vollmer. Moreover, in Example 9, Vollmer discloses the potassium formate brine to be 13.1 pounds per gallon which would be, of course, greater than 40% by weight KCOOH.]

As stated in item 7 of OA, although Vollmer does not specifically disclose the "true crystallization temperature (TCT), API 13 J" property for the aqueous suspension, because the aqueous suspensions disclosed by Vollmer and encompassed by the instant claims are the same, then Vollmer's aqueous suspension and that recited in the instant claims must inherently posses the same physical properties, such as TCT.

Thus, the instant claims are anticipated by Vollmer.

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Response to Arguments

The Obviousness-Type Double Patenting Rejection (item 2 of OA)

10. Applicant did not provide any substantive arguments in response to the captioned double patenting rejection previously made of record. Accordingly, the captioned ODP rejection has been maintained.

The 102 Rejection over Burdick (item 7 of OA)

11. Applicant's arguments in Response traversing the instant 35 U.S.C. 102 rejection as anticipated by Burdick have been considered but deemed moot due to the withdrawal of this rejection in view of Applicant's amendment to the independent claims in Response reciting "the brine introduced into the well during completion or workover."

However, this limitation raises indefiniteness issues in accordance with 35 U.S.C. 112, second paragraph due to independent claims 30, 57, 70 and 84, as currently amended, having a mixture of process of making and method of use steps as discussed above in paragraph #7 of the instant action. If, however, Applicant in a subsequent response removes this limitation to overcome this 35 U.S.C. 112, second paragraph, rejection, this 102 rejection over Burdick may be reinstituted in a subsequent action.

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The 102 Rejection over Vollmer (item 7 of OA)

12. Applicant's arguments proffered in Response traversing the captioned 35 U.S.C. 102 rejection of claims 70-76 and 84-90 as anticipated by Vollmer have been fully considered but deemed unpersuasive."

Applicant's arguments concerning Vollmer not suggesting the viscosifying composition containing anionic cellulose are inaccurate. In addition to the sections in Vollmer cited above in paragraph #9, Examiner respectfully draws Applicant's attention to the Title and claims 1, 8 15, 30 and 40 in Vollmer disclosing the composition used for viscosifying aqueous brine solutions, wherein the composition can contain an anionic cellulose or a polyanionic cellulose. If Applicant is instead intending to argue that Vollmer suggests that it's the polyol component (further included in Vollmer's viscosifying composition) that is responsible for viscosifying the brine, and this polyol component is not required to be present in the composition of the currently claimed invention, Applicant is respectfully reminded that the current independent claims recite "comprising of" [or "contains"] language, which are treated as an open-ended transitional phrases. Accordingly, the present claims would encompass embodiments of thickened brine compositions further containing non-recited additives/components, such as Vollmer's viscosifying composition containing water, salt, anionic cellulose, alkali formate **and** polyol. See MPEP 2111.03:

"The transitional phrases "comprising", "consisting essentially of" and "consisting of" define the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim. The transitional term "comprising", which is synonymous with "including,"

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"containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., > Mars Inc. v. H.J. Heinz Co., 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004) ("like the term comprising," the terms containing and mixture are openended.").< Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("The transition comprising" in a method claim indicates that the claim is open-ended and allows for additional steps."); Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) ("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts"). >In Gillette Co. v. Energizer Holdings Inc., 405 F.3d 1367, 1371-73, 74 USPQ2d 1586, 1589-91 (Fed. Cir. 2005), the court held that a claim to "a safety razor blade unit comprising a guard, a cap, and a group of first, second, and third blades" encompasses razors with more than three blades because the transitional phrase "comprising" in the preamble and the phrase "group of" are presumptively openended. "The word comprising' transitioning from the preamble to the body signals that the entire claim is presumptively open-ended." Id. In contrast, the court noted the phrase "group consisting of" is a closed term, which is often used in claim drafting to signal a "Markush group" that is by its nature closed. Id. The court also emphasized that reference to "first," "second," and "third" blades in the claim was not used to show a serial or numerical limitation but instead was used to distinguish or identify the various members of the group. Id."

In response to Applicant's arguments that the references fail to show certain features of the claimed invention, it is noted that the features upon which applicant relies (i.e., method steps in Examples in the specification involving the addition order of the various components when preparing the claimed viscosified composition) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) Moreover, Applicant's arguments that Vollmer teaches the composition solely in paste form are incorrect as shown above in paragraph #9. In addition to disclosing the viscosifying composition as a paste, Vollmer explicitly states that it can be in the form of a slurry or liquid fluid. (Col. 8, lines 20-23)

Therefore, the instant claims, as amended, are anticipated by Vollmer.

The 103 Rejection over Burdick and Boatman (item 8 of OA)

13. Applicant's arguments in Response traversing the instant 35 U.S.C. 103 rejection as unpatentable over Burdick in view of Boatman have been considered but deemed moot due to the withdrawal of this obviousness rejection in view of Applicant's current amendment to all the independent claims requiring "the brine introduced into the well during completion or workover."

As was the case regarding the 102 rejection over Burdick discussed in paragraph #11 of the instant action, if Applicant in a subsequent response removes this limitation to overcome the 35 U.S.C. 112, second paragraph, rejection, presented above in paragraph #7 of the instant action, this 103 obviousness rejection may be reinstituted in a subsequent action.

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Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571)272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James J. Seidleck/ Supervisory Patent Examiner, Art Unit 1796

JJF/JS